

PTO/SB/08A (07-05)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

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|------------------------|--------------------|
| Application Number | 10/720,982 |
| Filing Date | November 24, 2003 |
| First Named Inventor | Oh-Hun Kwon et al. |
| Art Unit | 1755 |
| Examiner Name | Karl E. Group |
| Attorney Docket Number | 1075-PM4269-US |

Sheet 1 of 1

U. S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|--|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | |
| | A1 | US- | | | |
| | B1 | US- | | | |
| | C1 | US- | | | |
| | D1 | US- | | | |
| | E1 | US- | | | |
| | F1 | US- | | | |
| | G1 | US- | | | |
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| | P1 | US- | | | |
| | Q1 | US- | | | |
| | R1 | US- | | | |
| | S1 | US- | | | |

FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ⁶ |
|--------------------|-----------------------|---|--------------------------------|--|--|----------------|
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | | |
| | T1 | JP 10-158060 | 06/16/1998 | Eastman Kodak Co. | English Abstract | |
| | U1 | | | | | |
| | V1 | | | | | |
| | W1 | | | | | |
| | X1 | | | | | |
| | Y1 | | | | | |

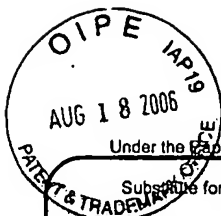
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| | | Number-Kind Code ² (if known) | | | |
| | A1 | US- 3,502,597 | 03/24/1970 | Bush | |
| | B1 | US- 5,612,144 | 03/18/1997 | Shinohara et al. | |
| | C1 | US- 5,830,819 | 11/03/1998 | Shikata et al. | |
| | D1 | US- 5,958,813 | 09/28/1999 | Aida et al. | |
| | E1 | US- 6,669,871 B2 | 12/30/2003 | Kwon et al. | |
| | F1 | US- | | | |
| | G1 | US- | | | |
| | H1 | US- | | | |
| | I1 | US- | | | |
| | J1 | US- | | | |
| | K1 | US- | | | |
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| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | | |
| | T1 | DE 3743630 C1 | 03/16/1989 | Siemens AG | English Abstract | |
| | U1 | JP 3-005363 | 01/11/1991 | Kyocera Corporation | English Abstract | |
| | V1 | | | | | |
| | W1 | | | | | |
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| | Y1 | | | | | |

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| | | Examiner Name | Karl E. Group |
| Sheet 2 of 3 | Attorney Docket Number | 1075-PM4269-US | |

| NON PATENT LITERATURE DOCUMENTS | | | |
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| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|  | A2 | AJ Wallash, "Electrostatic Discharge (ESD) in Magnetic Recording: Past, Present and Future", Proc. of Understanding ESD in Magnetic Recording, IDEMA, pgs 3-20, 2000. | |
| | B2 | AJ Wallash, et al., "ESD Failure Mechanisms of Inductive and Magnitoresistive Recording Heads," EOD/ESD Symposium 95, pgs 322-330 (1990). | |
| | C2 | J. Elston, et al., "Study of High-temperature Electrical Properties of Zirconia and Lanthanum Chromite Sinters," Proceedings of a Symposium on Magnetohydrodynamic Electrical Power Generation, pgs 1601, 389-403 (1966). | |
| | D2 | C. Lam, "Characterization of ESD Tweezers for Use with Magnitoresistive Recording Heads", EOS/ESD Symposium 1996, pgs. 14-21. | |
| | E2 | K. Kim, et al., "Advancements in Inherently Dissipative Polymer (IDP) Alloys Provide New Levels of Clean, Consistent ESD Protection", EOS/ESD Symposium 2000, pgs. 132-138. | |
| | F2 | R. Wilhelm et al., "Iron Oxide-doped Yttria-Stabilized Zirconia Ceramic: Iron Solubility and Electrical Conductivity", AM. Ceram. Soc. Bull., Vol. 58, No. 2, pgs 228-232, 1979. | |
| | G2 | N. Pratten, "Review, The Precise Measurement of the Density of Small Samples", J. Material Sci., Vol. 16, pgs 1937-1947 (1981). | |
| | H2 | ASTM: D257-93, "Standard Test Method for DC Resistance or Conductance of Insulating Materials." | |
| | I2 | FED. Test Method Std. No. 101, "Electrostatic Properties of Materials," Rev. B, Method 4046, Jan. 1969; Rev. C, Method 4046.1, Oct. 1982, Change Notice 1. | |
|  | J2 | N. Joassen, "Static-Electric Characterization of Semi-Insulating Materials", EOS/ESD Symposium EOS-6, 1984. | |

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| Examiner Signature |  | Date Considered | 2/20/2007 |
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| | A3 | G. Baumgartner, "Electrostatic Decay Measurement, Theory and Applications", EOS/ESD Symposium 1995, pgs 265-272. | |
| | B3 | M. Islam, et al., "Defect Chemistry of LaBO3 (B=La, Mn or Co) Perovskite-type Oxides, " J. Chem. Soc., Faraday Trans, 92930, pgs. 479-482 (1996). | |
| | C3 | M. DeBarr et al., "Conduction Mechanism in the La(Al, Mn)3 System", Point Defects and Related Ceramics, Ed. T.O. Mason, et al., Ceramic Trans. Vol. 24, Am. Ceram. Soc., pgs. 229-238, 1991. | |
| | D3 | | |
| | E3 | | |
| | F3 | | |
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